CLAIMS

What is claimed is:

1.   In a server, a method for providing information suitable for audio output, the method comprising:

   receiving a first set of information over a network based on a request for the first set of information;

   accessing a tagged document in response to receiving the first set of information; and

   generating a second set of information suitable for audio output based on the first set of information and the tagged document.

2.   The method of claim 1, wherein:

   the step of receiving the first set of information comprises receiving a web page based on a Uniform Resource Locator (URL) request for the web page;

   the step of accessing the tagged document comprises accessing an Extensible Markup Language (XML) document; and

   the step of generating the second set of information comprises generating filtered web content suitable for audio output based on the web page and the XML document.

3.　The method of claim 1, wherein the step of receiving the first set of information based on a request for the first set of information comprises the steps of:

　　　receiving speech information specifying the first set of information;

5　　　generating a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, and

　　　submitting the text request over the network.

10　4.　The method of claim 3, wherein the step of generating the text request comprises interpreting at least one primitive construct based on the speech information.

5.　The method of claim 4, further comprising the step of generating at least one additional primitive construct based on a request for a user-defined command.

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6.　The method of claim 3, wherein the step of generating the text request comprises applying a case-logic technique to the speech information.

7.　The method of claim 1, wherein the step of accessing the tagged document in

20　response to receiving the first set of information comprises:

　　　determining an identity of the request for the first set of information, and

　　　accessing the tagged document based on the identity of the request.

8.   The method of claim 7, wherein the identity of the request is based on at least one of an identifier for an originator of the request and an identifier for a destination of the request.

5   9.   The method of claim 1, wherein the step of generating the second set of information suitable for audio output comprises:

selecting at least one portion of the first set of information that is suitable for audio output; and

generating the second set of information based on selecting the at least one

10   portion of the first set of information.

10.   The method of claim 1, wherein the step of generating the second set of information suitable for audio output comprises:

generating text data suitable for audio output based on the first set of

15   information and the tagged document, and

generating audio data based on the text data.

11.   The method of claim 10, wherein the step of generating the text data suitable for audio output comprises generating at least one response and the step of generating

20   the audio data based on the text data comprises applying a text-to-speech (TTS) technique to the at least one response.

12.   The method of claim 1, wherein the step of accessing the tagged document is performed based on the request for the first set of information and approximately

25   concurrently with the step of receiving the first set of information.

13. The method of claim 1, wherein each of the first set of information, the tagged document, and the second set of information is at least one of a Hypertext Markup Language (HTML) page, an Extensible Markup Language (XML) page, a Virtual Reality Modeling Language (VRML) page, and a Standard Generic Markup Language (SGML) page.

14. A system for providing information suitable for audio output, the system comprising:

a document database configured for storing a plurality of tagged documents; and

a server comprising an executable resource, wherein the executable resource

receives a first set of information over a network based on a request for the first set of information;

accesses a tagged document from the document database based on receiving the first set of information; and

generates the second set of information suitable for audio output based on the first set of information and the tagged document.

15. The system of claim 14, wherein the first set of information is a web page based on a Uniform Resource Locator (URL) request for the web page; the tagged document is an Extensible Markup Language (XML) document; and the second set of information is filtered web content suitable for audio output based on the web page and the XML document.

16. The system of claim 14, wherein the executable resource receives speech information specifying the first set of information, generates a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, and submits the text request over the network.

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17. The system of claim 16, wherein the executable resource interprets at least one primitive construct based on the speech information.

18. The system of claim 17, wherein the executable resource generates at least one

10   additional primitive construct based on a request for a user-defined command.

19. The system of claim 18, wherein the executable resource applies a case-logic technique to the speech information to generate the text request.

15 20. The system of claim 14, wherein the executable resource determines an identity of the request for the first set of information, and accesses the tagged document based on the identity of the request.

21. The system of claim 20, wherein the identity of the request is based on at least one

20   of an identifier for an originator of the request and an identifier for a destination of the request.

22. The system of claim 14, wherein the executable resource selects at least one portion of the first set of information that is suitable for audio output, and generates the second set of information based on selecting the at least one portion of the first set of information.

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23. The system of claim 14, wherein the executable resource generates text data suitable for audio output based on the first set of information and the tagged document, and the executable resource generates audio data based on the text data.

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24. The system of claim 23, wherein the text data comprises at least one response, and the executable resource applies a text-to-speech (TTS) technique to the at least one response to generate the audio data.

15   25. The system of claim 14, wherein the executable resource, in an approximately concurrent time frame:

accesses the tagged document based on the request for the first set of information,

and receives the first set of information.

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26. The system of claim 14, wherein each of the first set of information, the tagged document, and the second set of information is at least one of a Hypertext Markup Language (HTML) page, an Extensible Markup Language (XML) page, a Virtual Reality Modeling Language (VRML) page, and a Standard Generic Markup

25   Language (SGML) page.

27.   A computer program product that includes a computer readable medium having instructions stored thereon for providing information suitable for audio output, such that the instructions, when carried out by a computer, cause the computer to perform the steps of:

5   receiving a first set of information over a network based on a request for the first set of information;

         accessing a tagged document in response to receiving the first set of information; and

         generating a second set of information suitable for audio output based on

10   the first set of information and the tagged document.

28.   The computer program product of claim 27, wherein:

         the step of receiving the first set of information comprises receiving a web

15   page based on a Uniform Resource Locator (URL) request for the web page;

         the step of accessing the tagged document comprises accessing an Extensible Markup Language (XML) document; and

         the step of generating the second set of information comprises generating filtering web content suitable for audio output based on the web page and the

20   XML document.

31.   A system for providing information suitable for audio output, the system comprising:

a document database configured for storing a plurality of tagged document pages;

means for producing a second set of information suitable for audio output, wherein the producing means

receives a first set of information over a network based on a request for the first set of information;

accesses a tagged document from the document database based on receiving the first set of information; and

generates the second set of information suitable for audio output based on the first set of information and the tagged document.

32.   The system of claim 31, wherein the first set of information is a web page based on a Uniform Resource Locator (URL) request for the web page; the tagged document is an Extensible Markup Language (XML) document; and the second set of information is filtered web content suitable for audio output based on the web page and the XML document.

29.   A computer program propagated signal product embodied in a propagated

medium, having instructions for providing information suitable for audio output,

such that the instructions, when carried out by a computer, cause the computer to

perform the steps of:

5   receiving a first set of information over a network based on a request for

the first set of information;

accessing a tagged document in response to receiving the first set of

information; and

generating a second set of information suitable for audio output based on

10   the first set of information and the tagged document.

30.   The computer program propagated signal product of claim 29, wherein:

the step of receiving the first set of information comprises receiving a web

page based on a Uniform Resource Locator (URL) request for the web page;

15   the step of accessing the tagged document comprises accessing an

Extensible Markup Language (XML) document; and

the step of generating the second set of information comprises generating

filtered web content suitable for audio output based on the web page and the XML

document.

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33.   A method for navigating a web by voice in a server configured for executing voice

web applications, the method comprising:

requesting a web page based on a voice web navigation request;

receiving a retrieved web page based on the voice web navigation request;

5   accessing an extensible markup language page in response to receiving

the retrieved web page;

generating filtered web content suitable for audio output based on the

retrieved web page and the extensible markup language page; and

generating the at least one audio output file based on the filtered web

10   content .

34.   The method of claim 33, wherein the step of requesting the web page based on the

voice web navigation request comprises the steps of:

receiving speech information specifying the web page;

15   generating a text request for the web page based on an acoustic speech

recognition (ASR) technique applied to the speech information, and

submitting the text request over the network.

35.   The method of claim 33, wherein the step of accessing the extensible markup

20   language document in response to receiving the retrieved web page comprises:

determining an identity of the voice web navigation request for the web

page, and

accessing the extensible markup language page based on the identity of the

voice web navigation request.

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36.   The method of claim 35, wherein the identity of the request is based on at least

one of an identifier for an originator of the voice web navigation request and an

identifier for a destination of the voice web navigation request.

37.   The method of claim 33, wherein the step of generating the filtered web content suitable for audio output comprises:

        generating text data suitable for audio output based on the retrieved web

5   page and the extensible markup language document, and

        generating audio data based on the text data.

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